67-237A . . A-30

CONTENTS

PART 1. FEBRUARY

PAGE

EPHRUSSI, BORIS, and GRANDCHAMP, SIMONE (Gif-sur-Yvette). Études sur la suppressivité des mutants à deficience respiratoire de la levure . . 1

WINGE, HELGA (Brasilia). Interspecific hybridisation between the six cryptic species of *Drosophila willistoni* group 9

RANA, R. S., and JAIN, H. K. (New Delhi). Adaptive role of interchange heterozygosity in the annual chrysanthemum 21

GALZY, P., and BIZEAU, C. (Montpellier). Étude du controle genetique du caractere " colonie lisse " chez *Saccharomyces cerevisiæ* Hansen . . . 31

YOSHIDA, YOSHIO (Chikugo). Theoretical studies on the methodological procedures of radiation breeding. III. Procedures for obtaining at least two desirable mutants in autogamous plants following seed irradiation . 37

JONES, D. A. (Birmingham). Heterokaryon compatibility in the *Aspergillus glaucus* Link group 49

JAMES, J. W. (Kensington). Response curves in selection experiments . . 57

SIMMONDS, N. W. (Bayfordbury). Mutant expression in diploid potatoes . 65

REES, H., and WALTERS, M. R. (Aberystwyth). Nuclear DNA and the evolution of wheat 73

WATKIN, I. MORGAN (Aberystwyth). *ABO* blood groups, human history and language in Herefordshire with special reference to the low *B* frequency in Europe 83

JINKS, J. L., and BROADHURST, P. L. (Birmingham). The detection and estimation of heritable differences in behaviour among individuals . . 97

JONES, R. MORLEY (Birmingham). Analysis of variance of the half diallel table 117

HEWITT, G. M., and JOHN, B. (Birmingham). The influence of numerical and structural chromosome mutations on chiasma conditions . . . 123

NOTES AND COMMENTS:

RENDEL, J. M. Scutellar bristles in *Drosophila*: A comment . . . 137

GRIGG, G. W. Unstable mutation in *Neurospora* 138

JAMES, J. W. Simultaneous selection for dominant and recessive mutants 142

REVIEWS:

CHANDRARATNA, M. F. Genetics and breeding of rice . . . 145

GRANT, V. The architecture of the germplasm 146

DUMBLETON, C. W. Russian-English biological dictionary . . . 146

COMFORT, A. Ageing 147

WASHBURN, S. L. (Ed.). Classification and human evolution . . 147

WEPMAN, J. M., and HEINE, R. W. (Eds.). Concepts of personality . 150

WILLIAMS, WATKIN. Genetical principles and plant breeding . . 151

COHN, N. S. Elements of cytology 152

CLARKE, C. A. Genetics for the clinician 153

BOOKS RECEIVED 155

GENETICAL SOCIETY OF GREAT BRITAIN: Abstracts of Papers . . . 157

PART 2. MAY

PAGE

PARSONS, P. A. (Melbourne). Assortative mating for a metrical characteristic in *Drosophila* 161

KEARSEY, M. J. (Birmingham). The interaction of competition and food supply in two lines of *Drosphila melanogaster* 169

LAWRENCE, M. J. (Birmingham). Variation in wild populations of *Papaver dubium*. I. Variation within populations; diallel crosses . . . 183

KEARSEY, M. J. (Birmingham). Biometrical analysis of a random mating population: a comparison of five experimental designs . . . 205

JESSOP, ADRIENNE P., and CATCHESIDE, D. G. (Copenhagen and Canberra). Interallelic recombination at the *his-1* locus in *Neurospora crassa* and its genetic control 237

SMITH, BRIAN R. (Canberra). Interallelic recombination at the *his-5* locus in *Neurospora crassa* 257

SIMMONDS, N. W. (Hertford). Somatic segregation of the spectacle pattern on potato tubers 277

BROWN, ELIZABETH S. (Inverness). Distribution of the *ABO* and Rhesus (*D*) blood groups in the north of Scotland 289

NOTES AND COMMENTS:

WALLACE, MARGARET E., and GUNN, R. E. Affinity in cotton . . 305

KEARSEY, M. J. Cooperation among larvæ of a wild type strain of *Drosophila melanogaster* 309

OWEN, D. F. Density effects in polymorphic land snails . . . 312

SIMMONDS, N. W., and HARBORNE, J. B. Control of Malvidin synthesis in the cultivated potatoes 315

REVIEWS:

HARRIS, MORGAN. Cell culture and somatic variation . . . 319

MATHER, KENNETH. Human diversity: the nature and significance of differences among men 320

DARLINGTON, C. D. Genetics and man 320

HARRISON, G. A., WEINER, J. S., TANNER, J. M., and BARNICOTT, N. A. Human biology: an introduction to human evolution . . . 321

MATHER, WHARTON B. Principles of quantitative genetics . . . 322

HARTMAN, PHILIP E., and SUSKIND, SIGMUND R. Gene action . . 323

BOOKS RECEIVED 324

PART 3. AUGUST

VED BRAT, S. (Oxford). Genetic systems in *Allium*. III. Meiosis and breeding systems 325

JAMES, S. H. (Sydney). Complex hybridity in *Isotoma petræa*. I. The occurrence of interchange heterozygosity, autogamy and a balanced lethal system . 341

PAGE

DADAY, HUNOR (Canberra). Gene frequencies in wild populations of *Trifolium repens* L. IV. Mechanism of natural selection 355

BREESE, E. L., HAYWARD, M. D., and THOMAS, A. C. (Aberystwyth). Somatic selection in perennial ryegrass 367

KAUL, D., and PARSONS, P. A. (Melbourne). The genotypic control of mating speed and duration of copulation in *Drosophila pseudoobscura* 381

TUCKER, C. L., and HARDING, J. A. (Davis). Quantitative studies on mating systems. II. Estimation of fitness parameters in a population of *Phaseolus lunatus* 393

DAWSON, PETER S. (Berkeley). Estimation of components of phenotypic variance for developmental rate in *Tribolium* 403

JAMIESON, ALAN (Edinburgh). The genetics of transferrins in cattle . . 419

EWENS, W. J. (Canberra City). Further notes on the evolution of dominance 443

TILNEY-BASSETT, R. A. E. (Oxford). Genetics and plastid physiology in *Pelargonium*. II. 451

NOTES AND COMMENTS:

VOSA, C. G. New chromosome numbers in *Tradescantia virginiana* . . 467

SHAH, S. S. Inter-relationships of chiasma frequencies in normal set bivalents in presence of extra heterochromatin and euchromatin in *Dactylis glomerata* subsp. *lusitanica* 470

MCBRIDE, G., and JAMES J. W. Effects of inbreeding and bristle number on reproductive success in selected lines of *Drosophila melanogaster* . 474

REVIEWS:

DUBININ, N. P. Problems of radiation genetics 481

HUTCHINSON, SIR JOSEPH (Ed.). Essays in crop plant evolution . . 483

LEWIS, K. R., and JOHN, B. The matter of Mendelian heredity . . 484

BOOKS RECEIVED 484

PART 4. NOVEMBER

DICKINSON, A. G., YOUNG, G. B., STAMP, J. T., and RENWICK, C. C. (Edinburgh). An analysis of natural scrapie in Suffolk sheep 485

COX, B. S. (Liverpool). Ψ, a cytoplasmic suppressor of super-suppressor in yeast 505

PIPKIN, SARAH B. (Baltimore). A mesonotal colour polymorphism apparently dependent on linkage disequilibrium 523

GRANT, V. (Claremont). Species hybrids and spontaneous amphiploids in the *Gilia laciniata* group 537

BARBER, H. N. (New South Wales). Selection in natural populations . . 551

DURRANT, A. (Aberystwyth). Analysis of reciprocal differences in diallel crosses 573

MOFFETT, A. A. (Natal). Genetic studies in Acacias. III. Chlorosis in interspecific hybrids 609

MOFFETT, A. A. (Natal). Genetical studies in Acacias. IV. Natural hybrids between *Acacia irrorata* and *A. mearnsii* 621

PAGE

NOTES AND COMMENTS:

COOK, L. M. A note on apostasy 631

OLBY, R. C. Francis Galton's derivation of Mendelian ratios in 1875 . 636

REVIEWS:

PEACOCKE, A. R., and DRYSDALE, R. B. The molecular basis of heredity 639

WILKIE, D. The cytoplasm in heredity 639

HAGEMANN, R. Plasmatische Vererbung 639

ETTER, L. E. (Ed.). The science of ionizing radiation . . . 642

NEEL, J. V., SHAW, M. W., and SCHULL, W. J. (Eds.). Genetics and the epidemiology of chronic diseases 642

RIFLE, D. C. Hybrids 644

NARR, K. J. Kultur, Umwelt und Leiblichkeit des Eiszeitmenschen . 645

GEERTS, S. J. (Ed.). Genetics today. 1, 2 and 3 645

BOOKS RECEIVED 645

GENETICAL SOCIETY OF GREAT BRITAIN: Abstracts of Papers . . . 647

INDEX OF SUBJECTS 655

INDEX OF AUTHORS 657